

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) A method of forming detection spots for analyte detection chips each including a support and a plurality of detection spots arranged in a regular pattern on a surface of the support and containing different components, each detection chip detecting a specific component of an applied analyte through determination of the relation of specificity between the specific component of the applied analyte and a specific detection spot among the detection spots, said method comprising the steps of:

providing a plurality of supports arranged in a two-dimensional array;  
providing a plurality of injection modules in a two-dimensional array such that an injection module is arranged above each respective support~~wherein, as means for forming detection spots on the surface of a support, a plurality of injection modules are provided, each injection module being equipped with a plurality of injection units arranged in a two-dimensional array, with each injection unit being adapted to jet spot-forming liquid containing a component for formation of the detection spots; and~~  
~~the spot-forming liquid is jetted simultaneously~~ jetting spot-forming liquid from the injection units of each injection module toward the surface of a respective support corresponding to the injection modules in order to simultaneously form detection spots on the surfaces of the all supports.

2. (Previously Presented) A method of forming detection spots according to claim 1, wherein the positions of the injection units of the injection modules, which face the surfaces of the respective supports, are determined such that the distances between the corresponding injection units of the injection modules become integral multiples of the intervals of the detection spots; and the injection modules successively form detection spots in different regions on the surfaces of the respective supports, while moving to locate above the surfaces of the supports successively.

3. (Cancelled)

4. (Previously Presented) A method of forming detection spots according to claim 1, wherein each injection module includes at least one injection unit having a charge port for charging a spot-forming liquid from the outside, a cavity into which the spot-forming liquid is introduced and charged, and a discharge port for discharging the spot-forming liquid; the cavity is made of ceramics; a piezoelectric/electrostrictive element is attached to at least one side wall surrounding the cavity; the spot-forming liquid is allowed to flow within the cavity; and upon drive of the piezoelectric/electrostrictive element, the volume of the cavity is changed in order to discharge the spot-forming liquid in a predetermined amount from the discharge port, to thereby form a detection spot on the surface of the support.

5. (Previously Presented) A method of forming detection spots according to claim 1, wherein each injection unit holds different spot-forming liquids for forming different detection spots containing different components.

6. (Previously Presented) A method of forming detection spots according to claim 1, wherein the detection chip is a DNA chip or DNA microarray having detection spots containing DNA fragments, a bio chip having detection spots including antibodies, or a protein chip having detection spots including proteins.

7. (Currently Amended) A method of forming detection spots for analyte detection chips each including a support and a plurality of detection spots arranged in a regular pattern on a surface of the support and containing different components, each detection chip detecting a specific component of an applied analyte through determination of the relation of specificity between the specific component of the

applied analyte and a specific detection spot among the detection spots, said method comprising the steps of:

providing a substrate having a plurality of supports joined together in a two-dimensional array;

providing a plurality of injection modules in a two-dimensional array such that an injection module is arranged above each respective support of said substrate wherein, as means for forming detection spots on the surface of a support, a plurality of injection modules are provided, each injection module being equipped with a plurality of injection units arranged in a two-dimensional array, with each injection unit being adapted to jet spot-forming liquid containing a component for formation of the detection spots;

~~the spot-forming liquid is jetted simultaneously~~ jetting spot-forming liquid from the injection units of each injection module toward the surface of a ~~single~~ respective support which faces the injection modules in order to simultaneously form detection spots on the surface of ~~the support~~ all supports; and

dividing the substrate into individual supports ~~the support is divided into a plurality of pieces.~~

8. (Currently Amended) A method of forming detection spots according to claim 7, wherein the positions of the injection units of the injection modules, which face the surface of the ~~support~~ substrate, are determined such that the distances between the corresponding injection units of the injection modules become integral multiples of the intervals of the detection spots; and the injection modules successively form detection spots in different regions on the ~~surfaces~~ surfaces of the ~~support~~ respective supports, while moving to locate above the ~~different regions of the support~~ surfaces of the respective supports successively.

9. (Cancelled)

10. (Previously Presented) A method of forming detection spots according to claim 7, wherein each injection module includes at least one injection unit having a charge port for charging a spot-forming liquid from the outside, a cavity into which the spot-forming liquid is introduced and charged, and a discharge port for discharging the spot-forming liquid; the cavity is made of ceramics; a piezoelectric/electrostrictive element is attached to at least one side wall surrounding the cavity; the spot-forming liquid is allowed to flow within the cavity; and upon drive of the piezoelectric/electrostrictive element, the volume of the cavity is changed in order to discharge the spot-forming liquid in a predetermined amount from the discharge port, to thereby form a detection spot on the surface of the support.

11. (Previously Presented) A method of forming detection spots according to claim 7, wherein each injection module includes a plurality of injection units which hold different spot-forming liquids for forming different detection spots containing different components.

12. (Previously Presented) A method of forming detection spots according to claim 7, wherein the detection chip is a DNA chip or DNA microarray having detection spots containing DNA fragments, a bio chip having detection spots including antibodies, or a protein chip having detection spots including proteins.

13. (Withdrawn) A method of forming detection spots for analyte detection chips each including a support and a plurality of detection spots arranged in a regular pattern on a surface of the support and containing different components, each detection chip detecting a specific component of an applied analyte through determination of the relation of specificity between the specific component of the applied analyte and a specific detection spot among the detection spots,

wherein, as means for simultaneously forming detection spots in a plurality of regions on the surface of at least one support, a plurality of injection modules are

provided, each injection module being equipped with a plurality of injection units adapted to jet spot-forming liquid containing a component for formation of the detection spots; and

the spot-forming liquid is jetted simultaneously from the injection units of the respective injection modules toward said plurality of regions corresponding to the injection modules in order to simultaneously form detection spots in said plurality of regions on the surface of said at least one support.